

## Title (en)

Carpets with surfactant-stabilised emulsion polymer coating binder

## Title (de)

Teppiche mit tensid-stabilisierten Emulsionspolymerbindemitteln

## Title (fr)

Tapis à liants de tapis polymères en émulsion stabilisée par un tensioactif

## Publication

**EP 2644769 A1 20131002 (EN)**

## Application

**EP 13174314 A 20110503**

## Priority

- US 2010033377 W 20100503
- EP 11720652 A 20110503

## Abstract (en)

Disclosed are carpet products made using certain types of coating compositions to secure carpet fibers to a carpet backing or substrates and/or to secure one or more carpet scrims or other layers to carpet backing. The coating compositions, which can be in the form of either precoating or skip coating compositions, are made from latex binder emulsions based on interpolymers emulsion polymerised from vinyl esters, ethylene, and a multifunctional cross-linking co-monomer such as an unsaturated silane. Such emulsions are also stabilised with surfactant emulsifiers but are substantially free of protective colloid stabilisers. The multifunctional co-monomer alters interpolymer molecular weight, branching and/or flow properties such that films formed from such interpolymers exhibit relatively low elongation values. When the emulsion binder exhibits such non-elongating film-forming characteristics, the carpet coating composition made from such binders can be easily processed without build-up on carpet processing apparatus. Such binder emulsions which are stabilised substantially only with surfactant emulsifiers, and not with protective colloids, also have excellent compatibility with other coating composition components.

## IPC 8 full level

**D06N 7/00** (2006.01); **C09D 131/04** (2006.01)

## CPC (source: EP)

**D06N 7/0073** (2013.01); **D06N 2203/042** (2013.01); **D06N 2205/106** (2013.01); **Y02P 70/62** (2015.11)

## Citation (applicant)

- US 4735986 A 19880405 - IACOVIELLO JOHN G [US]
- US 5026765 A 19910625 - KATZ HOWARD G [US], et al
- US 5849389 A 19981215 - LUNSFORD DAVID J [US]
- US 6359076 B1 20020319 - LUNSFORD DAVID J [US], et al
- US 2005287336 A1 20051229 - LUNSFORD DAVID J [US], et al
- US 5889098 A 19990330 - TRUMBO DAVID L [US]
- US 5576384 A 19961119 - NOELKEN ERNST [DE], et al
- US 7078455 B2 20060718 - HELDMANN CARSTEN [DE], et al

## Citation (search report)

- [A] EP 0564712 A1 19931013 - SCHAEFER MARBURGER TAPETEN [DE]
- [AD] US 2005287336 A1 20051229 - LUNSFORD DAVID J [US], et al
- [A] EP 1008689 A2 20000614 - NAT STARCH CHEM INVEST [US] & US 6359076 B1 20020319 - LUNSFORD DAVID J [US], et al

## Cited by

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## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**WO 2011139267 A1 20111110**; BR 112012028098 A2 20160823; CN 102869828 A 20130109; CN 102869828 B 20140709; CN 104004421 A 20140827; CN 104004421 B 20160824; EP 2567020 A2 20130313; EP 2567020 B1 20140219; EP 2644769 A1 20131002; EP 2644769 B1 20150121; WO 2011140065 A2 20111110; WO 2011140065 A3 20120119

## DOCDB simple family (application)

**US 2010033377 W 20100503**; BR 112012028098 A 20110503; CN 201180022172 A 20110503; CN 201410247904 A 20110503; EP 11720652 A 20110503; EP 13174314 A 20110503; US 2011034964 W 20110503